METHOD FOR MAKING ELECTRONIC DEVICES INCLUDING SILICON AND LTCC AND DEVICES PRODUCED THEREBY

Abstract of the Disclosure

A method for making an electronic device includes positioning first and second members so that opposing surfaces thereof are in contact with one another, the first member comprising silicon and the second member comprising a low temperature co-fired ceramic (LTCC) material. The method further includes anodically bonding together the opposing surfaces of the first and second members to form a hermetic seal therebetween. The anodic bonding provides a secure and strong bond between the members without using adhesive. The method may further include forming at least one cooling structure in at least one of the first and second members. The least one cooling structure may comprise at least one first micro-fluidic cooling structure in the first member, and at least one second micro-fluidic cooling structure in the second member aligned with the at least one first micro-fluidic cooling structure.